

Amendments to the Claims

Claims 1-9 (Cancelled).

10. (Currently amended) A method of making propylene glycol, comprising:
providing a composition containing initial reactants comprising one or both of lactate
and lactic acid;

adding acid to the composition;
after adding the acid, reacting the initial reactants with a composition comprising
lactate or lactic acid with hydrogen in the presence of a multimetallic catalyst;
wherein acid is added to the composition prior to the step of reacting;
wherein the lactate or lactic acid is converted with a yield of at least 60%; and
wherein the PG selectivity is at least 80%.

11. (Currently amended) The method of claim 10 wherein the step of reacting
the initial reactants lactate or lactic acid comprises reacting with hydrogen at a pressure of
at least 2300 psi (15.6 MPa),

wherein the carbon molar selectivity to PG is at least 30%.

12. (Original) A method of improving the reaction of hydrogen with a composition, comprising:

exposing the composition to hydrogen in the presence of a solid, rhenium-containing multimetallic catalyst;

wherein the composition comprises a component selected from the group consisting of: a 5 carbon sugar, a 5 carbon sugar alcohol, lactate and lactic acid; and

converting at least 80% of said component to lower molecular weight products including propylene glycol (PG);

wherein improving means that at the same conditions where the rhenium-containing multimetallic catalyst results in said at least 80% conversion, the yield of PG is improved by at least 5%, as compared with running the same reaction over each of: the same catalyst without rhenium, the same catalyst without rhenium but containing added weight of metal equal to the weight of rhenium in the improved method, and the same catalyst without rhenium but containing added moles of metal equal to the moles of rhenium in the improved method.

13. (Original) The method of claim 12 wherein the catalyst comprises nickel and the conversion of the component is continuous.

14. (Original) The method of claim 13 wherein the catalyst comprises a carbon support.

15. (Original) The method of claim 14 wherein the component comprises xylitol.

16. (Original) The method of claim 13 wherein the component comprises a 5 carbon sugar.

Claims 17-19 (Cancelled).